ABSTRACT

The invention relates to a novel preparation of Fe(VI) salts, also known as Super-iron or ferrates, based on direct electrolytic synthesis into the solid-phase. According to the invention there are two half-cells which are in an electro-chemical contact with one another through an electrically neutral ionic conductor, wherein one of said half-cells comprises a cathode and the other half cell comprises at least 1% by weight of an iron containing material, wherein a power supply is used to oxidize the iron containing material to a solid Fe(VI) salt.